

Draft Revised Saint Paul Bicycle Transportation Plan
Saint Paul Bicycle Advisory Board
June 11, 2007

Recommendation for a new policy framework for the full Transportation Plan:

Complete Streets Policy for Saint Paul (Chicago Language)

The safety and convenience of all users of the transportation system including pedestrians, bicyclists, transit users, freight, and motor vehicle drivers shall be accommodated and balanced in all types of transportation and development projects and through all phases of a project so that even the most vulnerable -- children, elderly and persons with disabilities -- can travel safely within the public right of way.

Bicycle Plan Summary:

A. Background

B. Vision and Goals

C. Types of Bikeways

D. Objectives

1. Develop and Maintain a Complete and Connected Bikeway System
2. Upgrade Existing Off-Street Trails and Add New Facilities
3. Provide Secure Bicycle Parking at Destinations
4. Better Integrate Bicycles and Transit
5. Improve Bicycle Safety, Awareness, Access, Equity, and Services

A. Background

Bicycling and walking are the two most common and popular forms of physical activity, and building physical activity into the daily lives of Saint Paul's residents has tremendous health, economic, environmental, and quality of life benefits. A human on a bicycle is the most efficient form of locomotion measured by scientists to date, using fewer calories per mile than any other form of movement. Bicycles are also an important mode of transportation for Saint Paul's low-income residents and homeless population, and are much less costly to own and maintain than an automobile.

Bicycle use decreases the number of vehicles on the road, resulting in decreased wear and tear on City infrastructure, which in turn leads to lower maintenance costs. Bicycles require far less space for parking than automobiles, and thus increased bicycle use can free up valuable land currently dedicated to automobile parking for other important uses.

B. Vision and Goals

1. Vision:

The Saint Paul Transportation Plan vision for bicycling is:

To make bicycling an integral part of daily life in Saint Paul and to move Saint Paul toward becoming a world class bicycling city that accommodates cyclists of varying skill levels riding bicycles for both transportation and recreation.

Goals:

This plan recommends projects, programs and policies for the next ten years to encourage more people to use bicycles more often. The overall goal is to increase bicycle use in Saint Paul, and to increase the transportation mode share of bicycling. While better data is needed with regard to the current mode share of bicycling for all trips in Saint Paul, 2000 Census data indicates that only 0.6% of home-to-work commute trips are made on a bicycle. Further, survey data from the Metropolitan Council's Travel Behavior Inventory indicates an overall bicycling mode share for all trips in Saint Paul of 2%.

The ten year goal for the City is to increase the bicycle mode share from 2% (2000) to 5.0%, and to increase the mode share of bicycling for commuting from 0.6% to 2.5%

Increasing bicycle use in Saint Paul has many benefits for the City and its inhabitants. The Bicycle Transportation Plan is consistent with Goal 4 of the City's Strategic Plan which states that "Saint Paul will be a leader in sustainable urban living by . . . reversing the negative effects

of global warming.” Bicycle trips that replace car trips reduce traffic congestion and delay, while also reducing associated air pollution including greenhouse gases.

The Bicycle Transportation Plan is also in keeping with Goal 5 of the City’s Strategic Plan which states that the principle of “sound infrastructure” will empower the City to be the most “livable City in America.”

All Saint Paul streets should be made safe and convenient for bicycling. As such, bicyclists’ needs should be included in the planning, design, construction and maintenance of all streets. Special attention should be given to bicycling whenever bridges, underpasses and expressways are constructed or improved so these facilities do not become significant barriers to bicycling.

The bikeway system should accommodate all users, and therefore include bike lanes on high traffic minor arterial roadways but also “quiet routes” (sometimes referred to as “bicycle boulevards”) along low-traffic volume, primarily residential streets.

Women account for only 1/3 of all cyclists in Saint Paul, and as such should be a target population for increasing bicycle use and mode share. Women also tend to be less physically active (on average) than men, so the public health and other benefits of increased cycling among women would be many. The design of bicycling infrastructure should take into consideration the perspectives and needs that women cyclists may have with regard to such issues as personal safety. Gender equalizing measures might include more safety lighting on bike paths, free “safe urban bicycling” workshops for new riders, and bikeways designed to accommodate users carrying children or hauling goods.

C. Types of Bikeways:

Bike Lanes on Streets:

The presence of striped bike lanes on streets benefits all users, by calling attention to the likely presence of bicyclists, slowing traffic down, and improving safety and the perception of safety for bicyclists. Bike lanes are used on higher traffic roadways to give a clear indication to motorists and cyclists that there is an area of the roadway designated for bicycles.

Signed Bike Routes:

If bike lanes are deemed infeasible or unnecessary, other treatments such as on-road stencils (including the “bike chevron”) and bike route signage may be utilized to indicate to both cyclists and motorists that bicycles are appropriate users of the roadway.

A new system of bicycle route signage should be developed that includes directional arrows, destinations, and distances. Just as for motorists, this information is extremely helpful for

cyclists who may be exploring a new area. (Best Practice: Chicago)

Bike Trails and Paths:

Off-road bike paths and trails can provide good bicycle facilities where there are few intersecting roadways, such as along the river and in railroad corridors. Poorly designed bike paths with too many intersecting roadways can put bicyclists in a position where drivers of motor vehicles do not expect them.

“Bike Boulevards”, “Bicycle Streets,” or Quiet Routes:

These routes which have been created in other cities in North America and Europe typically utilize low-traffic, largely residential streets. Routes are marked with some combination of signs or stencils. In some places, bicycles are given priority on these streets and they are “no thru traffic” streets for cars but still allow cars to be parked on the streets and to access homes and local destinations. Saint Paul should consider experimenting with such routes, particularly on quiet streets near arterial roadways that make important connections.

D. Objectives

Objective #1: Develop and Maintain a Complete and Connected Bikeway System.
(also see attached map)

	<u>Current Facilities</u>	<u>Projected 10 Year Totals</u>
Bike Lane Miles:	22	50
Signed Route Miles:	10.5	25
“Share the Road” Miles:	6	18
Trail Miles:		
Bike Racks:	100?	3,100

The bikeway system is the network of on- and off-street bicycle routes that are identified as the best places to bicycle in the city, based on factors such as safety and convenience. The bikeway system includes streets with bike lanes, streets with designated shoulders that are signed as bike routes, and streets that are signed or stenciled as bike routes but either do not require or cannot accommodate a full bike lane or striped shoulder. The top goal of this plan is to close identified gaps in the bikeway system that can be considered arterial bikeways and in those areas that create a significant barrier to the largest numbers of cyclists.

The attached map identifies north-south and east-west corridors throughout Saint Paul where

improved access and connections for cyclists are needed. Unlike the map used in the earlier version of this plan, the map identifies very few specific streets or locations where bikeways should be constructed. Rather, in general, the map identifies arterial corridors where better, safer conditions for cycling are needed, and leaves it up to a combination of Public Works staff, community members, and others to determine the best and most workable specific streets/locations for future bikeways.

In general, bikeways should be no more than ½ mile apart and arterial striped bike lanes and/or off-street trails no more than 1 mile apart. The following is a list of top priority areas for improvement to the current system of bikeways in Saint Paul.

- 1) Designate all parkways as bike routes and complete the Saint Paul “Grand Round” bicycle loop that traverses many of the City’s parkways and connects to the established Minneapolis “Grand Round” bicycle loop. Make improvements to “problem areas” such as the railroad trestle underpass on Raymond Avenue under the BNSF main line and the University of Minnesota Transitway.
- 2) Create a downtown bicycling network that connects the many bikeways leading into downtown. This will require the development of a downtown bicycling plan, which should be conducted by the City of Saint Paul in conjunction with the Saint Paul Transportation Management Organization, the Capitol River Council and other stakeholders. Preliminary recommendations include extending the bike lanes on Jackson to connect all the way through downtown; striped bike lanes on Sibley; bike lanes on Wabasha; a one-way bike lane uphill on Kellogg; bike lanes on 7th street from Kittson to St. Peter; bike lanes on 12th street; bike lanes on Broadway.
- 3) Create north-south routes in the western half of the City that connect across Interstate 94 to Central Corridor light rail stations and across the BNSF railway. These should include but not be limited to:
 - a) Significantly improved accommodation for bicycles on the Snelling Avenue bridges over Pierce Butler Route, the BNSF, Energy Park Drive, and Como Avenue, and a north-south bicycle route on or near Snelling.
 - b) Routes on minor arterials/collectors
 - c) “Quiet routes” such as Aldine, Griggs, Chatsworth, Grotto and Mackubin.
 - d) Completion of the route on Prior Avenue south to Summit Avenue
 - e) Completion of the route on Jackson street north to Larpenteur and south to downtown.
- 4) Integrate at least one east-west bicycle route on or parallel to University Avenue that will accommodate cyclists needing to connect to destinations along the light rail route.
 - a) University Avenue should accommodate bicycles in some fashion even after the construction of the Central Corridor Light Rail project, and this accommodation should extend east to Lafayette Road.
 - b) Alternative routes that make comparable connections should also be explored,

including the possible use of Sherburne Avenue or Charles Avenue as a “bicycle boulevard” or “quiet route,” and the possible use of the I-94 frontage roads as bicycle arterials.

- 5) Create an east-west route on or near Arlington Avenue to connect the western and eastern halves of the City.
- 6) Create new or improved north-south and east-west bicycle routes on the City’s east-side, including but not limited to:
 - a) (north-south) Johnson Parkway, Furness Parkway, Ruth Street, McKnight, and Prosperity.
 - b) (east-west) E. 3rd Street, E. 7th Street, and/or Minnehaha Avenue; Old Hudson Road; Phalen Boulevard; Wheelock Parkway; Arlington Avenue; Pacific to Plum. Fill the three block gap in the shoulder on Larpentour in the area around White Bear Avenue.
- 7) Create new or improved connected bicycle routes on the West side of Saint Paul, including but not limited to:
 - a) (north-south) Fill the gap on Wabasha Street between Water and Cesar Chavez; Smith Avenue or a nearby street; Stryker Avenue or a nearby street
 - b) (east-west) George Street or a nearby street; Annapolis or a nearby street
- 8) To make Saint Paul a more appealing destination for cyclists, coordinate with surrounding communities and jurisdictions to enhance inter-community bicycle transportation and connectivity. Support Hennepin County and City of Minneapolis efforts to build a new bicycle/pedestrian bridge across the river to extend the Midtown Greenway eastward and connect with Saint Paul’s planned extension of the Greenway.
- 9) Increase the number of places where cyclists can cross the Mississippi River, railroads and railyards, interstate highways and other major obstacles that currently limit the practicality of bicycling.
- 10) Create and implement a system of route identification and signage using names, numbers or a combination of the two, and incorporate directional and destination information.

In addition to these 10 high priority recommendations, the attached map identifies streets where new bicycling facilities would help to create a complete, comprehensive network of connected bikeways throughout the City:

Bicycle lanes and routes will be cleared of snow and debris to make them usable and safe year-around. On streets with bike lanes, this may require a pass through with the plow to clear the bike lane of new snow, and an additional run later to clear the lane of snow and ice “kicked up” into the lane by automobile traffic.

Road hazards such as potholes, broken glass and sewer grates that trap bicycle wheels should be identified on a regular basis and remedied quickly. Street and trail closures for special events should not apply to bicycles, or alternative options should be provided and indicated with signage.

Objective #2: Upgrade Existing Off-Street Trails and Add New Facilities

Good coordination between the Department of Public Works and the Department of Parks and Recreation will be required to integrate Saint Paul's system of off-road bicycle trails and facilities with on-street bicycle facilities.

A top priority for off-street facilities in the next ten years will be the development of the St. Paul Greenway project. This off street bicycle and pedestrian trail will be an extension of the Midtown Greenway in Minneapolis along the Canadian Pacific Railroad corridor in the western half of the City, paralleling I-94 in the west Midway industrial area and Ayd Mill Road, before connecting to the Sam Morgan Trail and into downtown Saint Paul.

The City should investigate with Minneapolis the possible use of the railroad corridor that parallels I-94 between Hwy 280 and the University of Minnesota for an additional off-street trail.

In addition the BNSF corridor that bisects the western half of the City should be planned to accommodate a bicycle/pedestrian trail.

A dedicated budget for trail maintenance will be needed to maintain a high level of service, which includes regular clearance of debris and snow removal in the winter. Volunteer trail maintenance groups such as "Friends of the Trail" or "Adopt a Trail" organizations should be encouraged and supported by the Parks and Recreation and Public Works departments.

The Sam Morgan Trail between the Highway 5 bridge and Interstate 35E is in particular need of resurfacing. The neighborhoods bordering the Sam Morgan Trail to the north are in need of additional access point to the Trail, particularly between Davern Street and Smith Avenue. Most existing trails have little or no lighting and are not plowed on a regular basis during the winter.

New trails should be constructed to include lighting and signage that identifies the trail, as well as directional signage to destinations. Older facilities should be upgraded with appropriate lighting and other security enhancements and design amenities. "Adopt-a-Trail" programs, and development or actively used adjacent spaces along trails should be highly encouraged, as increased activity along trail corridors promotes safety. Promoting safety through activity is of particular concern along dedicated trails that tend to be isolated from public view, such as parts of the Gateway and Vento trails and the future Saint Paul Greenway Trail.

Off-road bike paths should be paved for a smooth ride. The preferred treatment for new trails

shall be separate cyclists from pedestrians so as to avoid conflicts and accidents. Two-way bike paths should be 12 feet wide, striped down the middle, and signed for two-way use; a 10 foot minimum width may be acceptable where there are low bicycle volumes. Because one-way paths will often be used as two-way facilities, care should be used in selecting this type of facility; if necessary they should be 5 to 6 feet wide and designed to ensure one-way operation.

Objective #3: Provide Secure Bicycle Parking at Destinations

The presence of secure, well-place bicycle parking is critical to make bicycling safe, attractive, and convenient for as many people as possible. Secure bicycle parking shall be made available at public and private facilities to accommodate a growing proportion of the population that regularly uses a bicycle for transportation.

The 10 year goal for St. Paul is to install 3,000 bicycle racks across the City, with a particular emphasis of installing racks at commercial areas, in downtown, and at parks and other destinations.

The City shall develop an amendment to the zoning code to require bicycle parking as a proportion of required vehicle parking at all new development and re-development projects.

The City shall create a fund to develop a thorough system of bicycle parking facilities in the public domain, particularly at hubs of retail and commercial activity, in public automobile parking facilities, and at public gathering places such as parks and libraries.

The City shall develop a new policy for the provision of bicycle parking at events over a certain size (measured in attendance) that require a City permit.

Objective #4: Better Integrate Bicycles and Transit

The City of Saint Paul shall work with Metro Transit and other stakeholders to ensure that sufficient bicycle parking is provided at transit stations based on transit boarding/alighting data, and in particular ensure the installation of plentiful bicycle parking adjacent to the future Central Corridor light rail stations.

Connections to transit routes will be a major criterion in decisions about where to prioritize bicycle infrastructure projects, in particular the City of Saint Paul should work to improve bicycling connections to Central Corridor light rail and other future transitway stations. All Metro Transit buses are now equipped with a front bicycle rack that holds two bicycles, but not all of the region's "opt-out" buses are so equipped. All public buses operating in Saint Paul should be equipped with bicycle racks.

The majority of Saint Paul residents and workers live or work within two miles (a comfortable cycling distance and 10-15 minute ride for most cyclists) of a future Central Corridor light rail station. Multi-modal trips involving bicycling and transit are becoming increasingly common in the Twin Cities and in cities throughout the world.

Access to public transit significantly increases the range and flexibility of bicycle trips, and convenient bicycling routes and secure bicycle parking can greatly enhance the potential for transit ridership. Good connections between bicycling routes and transit have the added benefit of reducing the demand for automobile park-and-ride facilities, which are a poor use of valuable urban land.

Objective #5: Improve Bicycle Safety, Awareness, Access, Equity, and Services

Safety

The City shall work to increase bicyclist safety through effective law enforcement, detailed crash analysis, and engineering improvements to reduce the risk of crashes. Enforcement of traffic laws helps reduce the number of injuries suffered by cyclists and establishes a more inviting environment for bicycling. Key strategies include training police officers to enforce laws that support a safe bicycling environment, and analyzing the circumstances of serious bicycle crashes to help prevent them from recurring.

The City shall support efforts to develop safe bicycling skills in adults and children through bicycle safety education in schools, bicycle safety “rodeos,” and other avenues to reach cyclists of all ages. Safe Routes to Schools programs, which include cycling as a component, should be pursued.

Personal safety of cyclists in relation to crime must also be addressed. Cyclists, like pedestrians, are potentially vulnerable to being victims of crime, particularly when riding at night in low-traffic or poorly lit areas. Women, who are already a minority among cyclists, may have real and perceived concerns in this area that can be a significant barrier to more bicycling. These issues must be addressed and included in bicycle safety awareness and education work, as well as in the design of bicycling facilities.

Awareness and Education

The City of Saint Paul shall partner with schools, nonprofits, other government agencies, and businesses to educate bicyclists, motorists, and the general public about bicycle safety, the rules of the road, the benefits of bicycling, the existence and location of bikeways, bicycle parking facilities, and information about how best to get from one location to another on a bicycle. Bicycling-oriented tourism is a growing segment of the tourism market, and as such improved information and infrastructure can attract visitors to the City who will spend money and support the local economy.

Tools for achieving these goals include:

- ★ The City should work to improve access to regularly updated information on the City's website about bikeways, newly opened facilities, construction and detours, events, etc.
- ★ The City should also work to make free or low costs bicycle maps available to the public, both in hard copy and on-line. Opportunities to collaborate with Ramsey County, the City of Minneapolis, and others in this area should be considered.
- ★ The City should aim to increase bicycle use through targeted marketing with a strong emphasis on the health and environmental benefits of cycling.
- ★ The City should create and track measurable goals in the area of bicycle education and awareness, such as the number of people (youth and adults) attending bicycle education classes or exposed to bicycling safety curriculum, the number of people attending bicycling in traffic seminars, etc.

Access and Equity

Ensuring access to safe, affordable bicycles and bicycling facilities for low-income residents who do not own an automobile is another way to increase bicycling mode share. This can be achieved through community and public service bicycle shops that offer affordable mechanical services, the opportunity to recycle bicycles, and mechanical and safety education, such as the Sibley Bike Depot in downtown Saint Paul. The City of Saint Paul should support these efforts.

Bicycle Services

Providing facilities for cyclists to not only park their bikes but also to shower, store gear, and get needed bike maintenance work can help to make bicycling more convenient and to level the playing field with driving a car. Many cities throughout the U.S. have created "bike stations," particularly in downtowns or other high employment areas to serve this purpose. The City of Saint Paul should explore the creation of one or more of these facilities, including one in the downtown area, possibly in a renovated Union Depot multi-modal transit station.

The City should also pursue opportunities to partner with employers to offer shower and locker facilities and other "trip-end" facilities for bicycle commuters. An ordinance requiring the installation of shower/locker facilities for all employers over a certain threshold size should be explored.